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AIR QUALITY ELEMENT
OF THE
COUNTY OF SACRAMENTO
GENERAL PLAN

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December 15, 1993

County of Sacramento

Planning and Community Development Department
General and Advance Planning Section

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**SACRAMENTO COUNTY GENERAL PLAN
AIR QUALITY ELEMENT**

CHAPTER 10

THEORY OF THE EARTH
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SACRAMENTO COUNTY GENERAL PLAN AIR QUALITY ELEMENT

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LIST OF ACRONYMS

<u>APCD</u>	Air Pollution Control District
<u>AQMD</u>	Sacramento Metropolitan Air Quality Management District
<u>ARB</u>	California Air Resources Board
<u>AQAP</u>	Air Quality Attainment Plan
<u>AQMA</u>	Air Quality Maintenance Area
<u>BACT</u>	Best Available Control Technology
<u>Caltrans</u>	California Department of Transportation
<u>CCAA</u>	California Clean Air Act
<u>CFC</u>	Chlorofluorocarbon
<u>CO</u>	Carbon Monoxide
<u>EMD</u>	Environmental Management Department
<u>EPA</u>	Environmental Protection Agency
<u>HC</u>	Hydrocarbon
<u>NOx</u>	Oxides of Nitrogen
<u>O₃</u>	Ozone
<u>ROG</u>	Reactive Organic Gases
<u>SACOG</u>	Sacramento Area Council of Governments
<u>SIP</u>	State Implementation Plan
<u>TCM</u>	Transportation Control Measure
<u>TOD</u>	Transit-Oriented Development
<u>TSMP</u>	Transportation Systems Management Plan

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SACRAMENTO COUNTY GENERAL PLAN AIR QUALITY ELEMENT

Section I

THE ROLE OF THE AIR QUALITY ELEMENT

INTRODUCTION

Air, like water, is a public resource that must be protected. Without the maintenance of appropriate air quality standards, threats to public health and a declining quality of life may result. Sacramento County suffers from air quality degradation which is caused, in part, by local topographic and meteorological conditions which are exacerbated by urbanization. The Air Quality Element, although not mandated by state planning law, has been included in the Sacramento County General Plan to ensure a healthy environment through the management of our air resources.

It is essential that the County's responsibilities with respect to air quality planning are clearly defined. Many agencies are currently involved in the implementation of federal and state legislative mandates. As a result, the role and authority of the respective agencies are not always clear. It is equally important that the Air Quality Element integrates the goals, objectives, and policies of the General Plan Elements. The measures that must be implemented to improve air quality relate to transportation management, land use, and urban design.

In summary, the Air Quality Element:

1. Provides a definitive statement of the role of the General Plan within the existing regulatory structure and delineates the responsibilities of Sacramento County relative to the other agencies, and
2. Acts as a focus for General Plan policy relating to air quality, integrating the policies of land use, circulation, and community design.

REGULATORY AND ORGANIZATIONAL FRAMEWORK

The Federal Clean Air Act (CAA) of 1977 directed the Environmental Protection Agency (EPA) to establish national ambient air quality standards (NAAQS). Primary standards are requisite to protect public health. Secondary standards are requisite to protect public welfare associated with the presence of contaminants in the ambient air. States that contain areas that exceed the standards must submit plans for attainment of the standards in those areas. The most crucial condition of the plans, called State Implementation Plans (SIPs), is that they provide for attainment of primary NAAQS within three years from the date of the approval of the plan.

The Sacramento Air Quality Maintenance Area (SAQMA), which is made up of Sacramento County, Yolo County, and parts of Placer and Solano Counties,

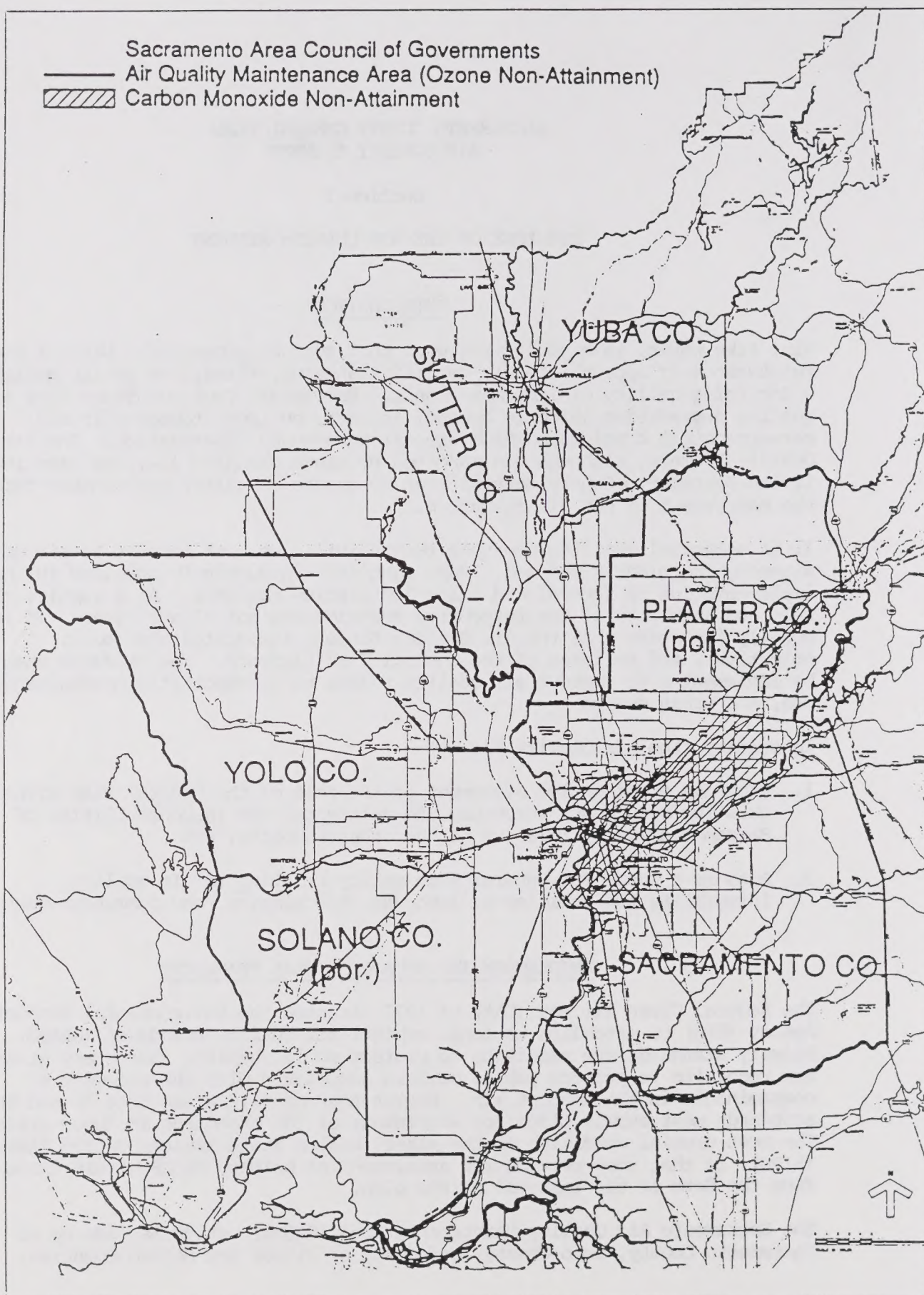


Figure I-1. Sacramento Air Quality Maintenance Area. (Source: SACOG)

adopted individual programs to reduce air pollution. These locally adopted programs, along with the programs of county Air Pollution Control Districts (APCDs) and requirements for restrictions on automobiles by the Air Resources Board (ARB), formed the Air Quality Plan for the Air Basin required by the CAA Amendments of 1977. The Plan established air pollution control strategies intended to attain federal air quality standards by the December 31, 1987 deadline, as specified in the CAA Amendments. That deadline now has passed, and the Sacramento Metropolitan area remains a federal non-attainment area for O₃ and CO.

In light of the deadline for attainment of the federal NAAQS and the severe air quality problems in the region, the Sacramento Area Council of Governments (SACOG) coordinated a series of meetings among cities and counties in the region, the EPA, the ARB, APCDs, and the California Department of Transportation (Caltrans), to discuss future air quality planning. The result of these meetings was the development of, and agreement on, a long-term air quality planning program to be coordinated by SACOG.

The air quality planning process underway includes three major activities. The first activity, a consultant study, was completed in the summer of 1988. It recommended creation of an air quality model for the SAQMA. The second activity, completed in early 1990, involved preparation of an interim Regional Air Quality Plan (RAQP) to provide a new emissions inventory through 2010, evaluate emission-control strategies, and serve as a basis for the adoption by cities and counties of emissions control measures. The final activity, expected to be complete by 1992, will be computer modeling of air quality in the Sacramento area, and updating of the interim RAQP based on the results. Although not required by statute, and having no regulatory authority, the RAQP represents local initiative on the part of the cities and counties in the affected region to devise strategies for solving their air quality problems.

While the SACOG planning process was proceeding, the California Clean Air Act (CCAA) and AB 4355 (Connelly) became effective on January 1, 1989. AB 4355 provided the Sacramento County APCD with increased authority to regulate land use, transportation, and areawide sources of air pollution as a means of implementing the requirements of the CCAA. The Act also changed the name of the Sacramento County APCD to the Sacramento Metropolitan Air Quality Management District (AQMD), effective July 1, 1989.

The CCAA provides a planning framework for attainment of California Air Quality Standards. Local APCDs and AQMDs in violation of state standards are required to prepare air quality attainment plans. The Act provides for the designation of Air Basins into three classes: moderate, defined as an area that can attain state and federal air quality standards by December 31, 1994; serious, defined as an area that can attain the standards by December 31, 1997; and severe, defined as an area that cannot specify an attainment date.

For each class, the Act specifies air quality management strategies that must be adopted. For all classes, attainment plans are required to demonstrate a five percent per year reduction in emissions of air pollutants or their

precursors, unless the ARB determines that all feasible air pollutant control measures are being employed. The classifications required by the CCAA will not be fully decided until all APCD's/AQMD's attainment plans have been completed and approved. Only then will estimates of the time required to reach attainment be estimated. The Sacramento Metropolitan Air Quality Management District's attainment plans were submitted to the ARB in July of 1991. The California Air Resources Board (ARB) held a public hearing on the plan in May of 1992. It is required that the plan be updated every three years.

No effective sanctions are included in the Act. Districts are only required to implement reasonable measures. If a district is unable to meet the standards with such programs, its AQAP must be updated to include "contingency measures".

The CCAA recognizes that pollution does not respect political boundaries, and must be managed on a regional basis. The Act requires the ARB to assess the transport of air pollutants from one air district to another. The ARB has designated that on some days the broader Sacramento Area emissions were the main cause of violations of the ozone air quality standard in the Upper Sacramento Valley. Because the Sacramento area is a source of non-attainment for another airshed, the air quality plan must meet the most stringent requirements imposed by the ARB. These requirements include the application of Best Available Retrofit Control Technology (BARCT) and a permitting system for new and modified sources that achieves no net increase in ozone precursors. These mitigation requirements apply to sources of Reactive Organic Gases (ROG) and to sources of nitrogen oxides.

In addition to criteria air pollutants, other air pollutants have been found to be highly injurious, even in small quantities. Because they are relatively uncommon; however, these air pollutants have not gone through the lengthy and costly process needed to set National Ambient Air Quality Standards. Instead, these pollutants are controlled through the National Emissions Standards for Hazardous Air Pollutants (NESHAPS), emissions limits that have been promulgated by EPA for asbestos, beryllium, mercury, vinyl chloride, benzene, radionuclides, and coke oven gas.

Emissions of hazardous air pollutants in California are governed by the 1983 Toxic Air Contaminants law, also known as the Tanner Act. The Toxic Air Contaminant law establishes a two-part scheme; first it provides for the identification of toxic air contaminants, and then it provides for the adoption of controls on emissions of air toxics so identified.

The State has implemented additional requirements for the potential release of asbestos fibers. California is one state that contains serpentine rock structures, a naturally occurring source of asbestos fibers. Any construction activities that may unearth or disturb serpentine rock must be performed carefully and in accordance with state guidelines. In addition, guidelines have been put in place dealing with the demolition of existing structures that may contain materials that have asbestos in them. If at all possible, asbestos containing materials should be removed from the structure before it is destroyed to prevent the release of asbestos fibers into the ambient air.

The Federal Clean Air Act Amendments (CAAA), enacted in November of 1990, provide strict guidelines for the attainment of NAAQS. The most extensive and burdensome provisions by far of Title I of the CAAA relate to areas that have failed to attain ambient standards for ozone. The AQMD will have to implement many new controls on volatile organic compounds and oxides of nitrogen. A new attainment plan will have to be developed for each pollutant in the region whose concentration exceeds the NAAQS (CO, O₃, and PM₁₀). Major new sources must use Best Available Control Technology (BACT) and provide 100 to 150 percent offsets of any new emissions. A 15 percent reduction in volatile organic compounds (VOC) emissions must be achieved in six years, with additional emissions reductions of 3 percent per year until attainment is reached. Once the attainment is demonstrated, the State will have to submit a "maintenance plan" to EPA, demonstrating how air quality will be attained over the next ten years despite anticipated population growth and development.

GENERAL PLAN POLICY COORDINATION

Several elements of this General Plan include goals, objectives, and policies that are intended to promote the attainment of air quality goals. The role of the Air Quality Element is to identify how the goal of attaining clean air has influenced General Plan policy and to establish the potential for air quality benefits that might be realized through the implementation of these policies.

The use of the single-occupant automobile as a primary means of transportation is a critical link among the elements of the General Plan. Increased automobile emissions, whether as a result of population growth or increased use, equates to a degradation in air quality. The Circulation Element addresses the efficiency of the automobile transportation network and describes policies to promote the development and use of alternative modes of transportation. The Land Use Element addresses the spatial framework of the community which determines transportation needs. That Element also describes community design standards which refine this spatial framework and incorporate design elements that discourage automobile use and encourage alternative transportation modes.

LAND USE ELEMENT

The Land Use Element specifies an urban design that is compatible with state and federal mandates for the attainment of air quality goals. The Element focuses on strategies for growth that emphasize efficiency in providing urban services and promote a reduction in automobile use. The policies, intended to guide the future growth and development in Sacramento County, describe the composition and intensity of land uses, locational criteria, and the timing of development.

Included in the Land Use Element are policies encouraging mixed use developments or transit-oriented developments. Transit-oriented developments (TOD's) define a land use pattern that includes increased densities and intensities around transit stations. The intent is to offer mass transit as a transportation alternative to a greater number of county

residents. The design of a TOD is also conducive to alternative forms of transportation, such as bicycling and walking. This is accomplished through the arrangement of buildings, parking lots, paths, and open space to create an environment that restricts automobile travel and promotes alternatives.

The composition of land uses is an important part of the TOD land use designation. It is described as "mixed use" development, an integration of residential land uses with public, commercial, and office space. The purpose of this configuration is to bring the places where people live, work, and shop closer together, reducing the need for vehicular travel.

The urban form that is described in the Land Use Element provides a model for the assessment of impacts to air quality by land use development. Projects can be evaluated on the basis of their comparative degree of conformity to the urban design features that are described above, those which limit air pollution. The evaluation of a project's impact on air quality will be further enhanced through the permit process that is established by the Air Quality Element.

CIRCULATION ELEMENT

The significant policy of the Circulation Element requires Sacramento County to conduct transportation planning in a manner consistent with the Plan's air quality goals. Consistency is accomplished through policies that promote the use of mass transit or other transportation alternatives while discouraging single-occupant vehicular use. In this manner, both a major cause of the air quality problem and potential solutions are simultaneously addressed.

Transportation alternatives that reduce air pollution are encouraged by the policies of the Circulation Element. Mass transit increases the efficiency of transportation by increasing the number of people that are transported by a single "vehicle". The result is a reduction in the per capita energy consumption which translates to a reduction in air pollutant emissions. The use of the bicycle and walking as means of transportation reduces emissions to an even greater extent. The Element establishes policies to promote these transportation alternatives as well as mass transit.

Measures to improve the efficiency of vehicular travel are also an important component of the Circulation Element. High occupancy vehicle (HOV) lanes, flexible work hours and schedules, trip reduction and transportation control measures, and parking controls represent measures that are included in this Element and contribute to the improvement of air quality.

The Circulation Element seeks to reduce existing financial subsidies for automobile use. The costs of the use of the automobile to society, in terms of air quality degradation, are high. Government cannot afford to pay for programs that encourage automobile use on one hand, and on the other hand pay for programs that are intended to reduce automobile emissions and their adverse impacts.

A need for public awareness is recognized by the Circulation Element. The popularity of the automobile must be countered with a knowledge of how automobile emissions impact air quality. Without this, there will be no motivation for a shift of emphasis from the auto to mass transit or other alternative transport modes.

Finally, a policy framework is provided by the Circulation Element for the implementation of SACOG's Regional Air Quality Plan and AQMD's Air Quality Improvement Strategy (Figure I-2). The Element has integrated those policies and programs that relate to TCM's and other transportation measures outlined in these plans. While the purpose of the Circulation Element is to provide an adequate circulation system, the policies of the Element are very clear; the transportation and circulation goals are not to be met at the expense of air quality.

The Air Quality Improvement Strategy supplies the basis for the Air Quality Attainment Plan (AQAP). The AQAP is designed to bring Sacramento County into compliance with California Clean Air Act requirements. The AQAP offers detailed information on current air quality and future trends. The Plan focuses on emission control programs for stationary and indirect sources of air pollution. The transportation control measures of the AQAP complement the land use strategies presented in the Air Quality Element.

TRANSPORTATION PLANNING AND AIR QUALITY CONFORMITY

Prior to the Federal Clean Air Act Amendments of 1990 there existed little substantive guidance on what was required in a conformity assessment. The 1990 amendments added a great deal of substance to the conformity assessment procedures. Congress finally defined conformity in the statute. The definition states that conformity of an activity (i.e. project, program or plan) to a SIP (State Implementation Plan for Air Quality) means:

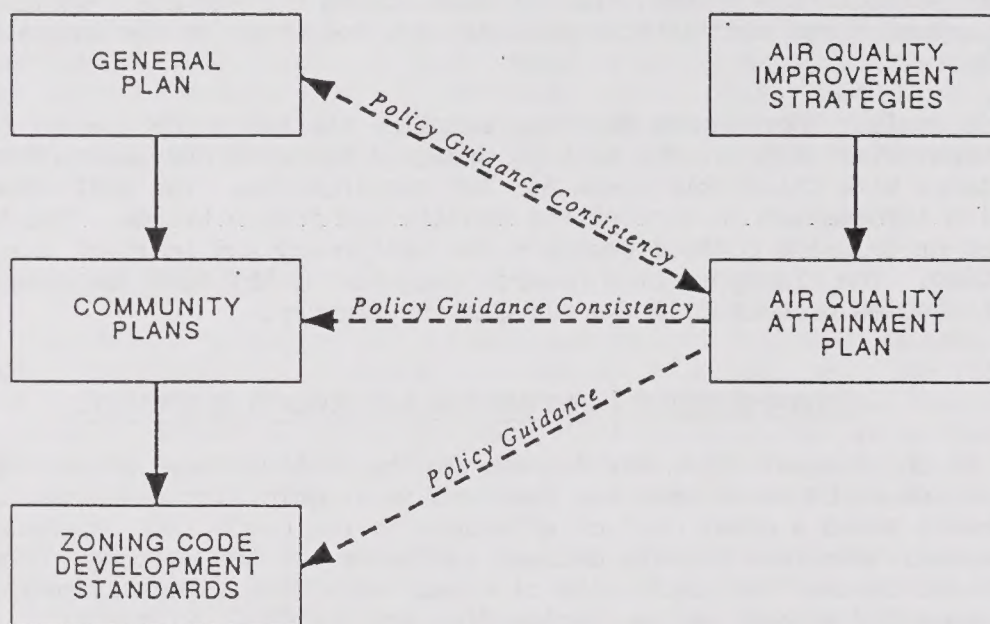
- (a) conformity to the SIP's purpose of eliminating or reducing the severity and number of violations of the federal standards and expeditiously achieving attainment of the federal standards; and
- (b) the activity will not (i) cause or contribute to any new violation or increase the frequency or severity of any existing violation of any standard in any area, or (ii) delay timely attainment of any standard or any required interim emissions reduction or other milestone in any area. (42 U.S.C. § 7506(c) (1) (A), (B))

The more specific portion of the definition states that transportation plans and programs are deemed to conform to the SIP and, therefore, may be adopted or approved by the MPO (Metropolitan Planning Organization, e.g. SACOG) if:

- (a) the emissions expected from the implementation of the plans and programs are consistent with the estimates of motor vehicles emissions and emission reductions contained in the SIP; and

Land Use Planning

Air Quality Planning



----- Line of Influence
———— Lines of Procedure

Figure I-2. Land Use/Air Quality Planning Integration in Sacramento County (Source: SMAQMD)

- (b) the plans and programs provide for timely implementation of the transportation control measures in the SIP, consistent with schedules included in the SIP. (42 U.S.C. § 7506(c)(2))

The definition of conformity recognizes the role of transportation planning in addressing air quality problems. There is now a direct link between the approval of transportation programs and plans and the requirement that a SIP demonstrate that an area will achieve specific emission reductions. One of the tests for conformity is that the plan or program must be "consistent" with the necessary emission reductions contained in the SIP. It would appear that at a minimum the conformity assessment must demonstrate that the plan or program will achieve a level of vehicle use that does not prevent the area from achieving the emission reductions contained in the SIP.

While the 1990 amendments are a significant step in clearing up some of the mysteries surrounding conformity assessments, there are still many questions. Therefore, the 1990 amendments required that by November 15, 1991, EPA, with the Department of Transportation's concurrence, promulgate criteria and procedures for demonstrating and assuring conformity. The procedures and criteria are required to include a consultation procedure to be undertaken by the MPO and the Department of Transportation with the state and local air quality agencies and state departments of transportation before the MPO and Department of Transportation make conformity determinations. While EPA had a November 15, 1991 deadline for producing the procedures and criteria, it has failed to date, to produce such procedures and criteria. No date has been given for release of the final version of the procedures and criteria.

The 1990 amendments include criteria for making conformity assessments that are to be used by MPOs until the SIP revisions are approved. In order to be in conformity during this interim period, transportation plans and programs

- (a) must be consistent with the most recent mobile source emissions estimates;
- (b) provide for expeditious implementation of the TCMs that are in the existing SIP; and
- (c) for ozone and CO non-attainment areas, contribute to annual emission reductions pursuant to 42 U.S.C. Sections 7511a(b)(1) and 7512a(a)(7).

The second requirement means that the MPO must implement any TCMs in the SIP that have not been previously implemented. The third requirement means that the plan or program must "contribute" to a 15% reduction in volatile organic compounds over six years, or 2½% a year. It is unclear what is meant by "contribute".

The 1990 amendments also added criteria to be used during the interim period to determine whether a transportation project is in conformity:

- (a) the project must come from a plan and program that meets the three criteria set forth above (the interim criteria for plans and programs); and,

- (b) in CO non-attainment areas the project must eliminate or reduce the severity and number of violations in the area substantially affected by the project.

The conformity assessment requirements are a significant link between transportation planning and air quality. They force transportation planning agencies to consider the air quality impacts of their actions. Such agencies can no longer ignore the realities of the interconnection between the two areas.

The Sacramento Metropolitan Air Quality Management District is working with SACOG on the establishment of interim conformity procedures. The District will also work with SACOG in the development of final conformity procedures once EPA's guidance document is released. SACOG's conformity determination procedures will be submitted for approval as a SIP revision by November 15, 1992.

**SACRAMENTO COUNTY GENERAL PLAN
AIR QUALITY ELEMENT**

Section II

GOALS, OBJECTIVES, AND POLICIES

GOAL: Air Quality which protects and promotes the public health, safety, welfare, and environmental quality of the community.

OBJECTIVES

The integration of air quality planning with the land use, transportation and energy planning processes.

INTENT: The degradation of air quality in Sacramento County is largely a result of mobile source emissions. The existing transportation system encourages the use of the single-occupant automobile and does not emphasize efficiency in transit. Land uses in Sacramento County have been planned to accommodate the use of petroleum-fueled vehicles, instead of mass transit, or alternative transportation modes. Air quality planning can only achieve success through the implementation of land use and transportation policies that offer alternatives to the kind of development that has been encouraged by past General Plan policies.

A safe and healthful environment for pollution sensitive residential land uses and sensitive receptors.

INTENT: The very young and the elderly are known to suffer greater threats to their health from air pollution than the rest of the population. Land uses, such as schools, hospitals, parks and elderly housing, should be sited to minimize the possible effects of air pollution from both stationary and mobile sources.

A reduction in motor vehicle emissions through a decrease in the average daily trips and vehicle miles travelled.

INTENT: Vehicular emissions vary with each operational stage of a petroleum-fueled engine. "Running exhaust emissions" occur when the engine is warm and operational. These emissions increase with increased distance and decrease with decreased distance.

Reductions in emissions which result from reducing the total number of daily trips arise from two sources. Emissions when the engine is first started, or "cold start emissions" are reduced with fewer trips. Additional emissions reductions are realized by limiting emissions which occur after a vehicle is stopped. These "hot soak emissions" occur when the heat from the engine causes gasoline in the carburetor or fuel system to "boil off".

Compliance with federal and state air quality standards.

INTENT: Both federal and state governments have established standards for certain pollutants. Concentrations of these pollutants in excess of the standard is in violation of state and federal laws and may pose a health threat. Also, continued violations without reasonable progress toward attaining a reduction in emissions could result in sanctions by federal or state governments.

A reduction in releases of ozone depleting compounds in order to ensure the protection of the stratospheric ozone layer.

INTENT: Ozone in the lower atmosphere creates a health hazard; however, ozone in the upper atmosphere absorbs damaging ultraviolet rays, protecting the earth's surface. The release of "ozone-depleting" compounds such as Chlorofluorocarbons (CFC's) into the atmosphere eliminates ozone in the stratosphere.

A reduction in motor vehicle emissions through increasing reliance on electric and other clean alternative fuel and low emission vehicles.

INTENT: Increasing the proportion of low emission vehicles and zero emission vehicles on Sacramento County roadways will lend strong support to other long term strategies that promote transit and link land use to transportation. The Sacramento Municipal Utilities District (SMUD) is leading in this important approach to the problem by promoting clean-fuel and electric vehicles. However a significant effect on air quality may be years away, until the proportion of low emission vehicles becomes significant. In the long-term the County must also support transit through incentive programs and land use planning. Otherwise the rising number of vehicle trips may offset the reductions in emissions. Policy AQ-11 and seven implementation measures support the low emission vehicle approach.

POLICIES

Point and Area Source Control Policies

- AQ-1. Minimize air pollutant emissions from Sacramento County facilities and operations.
- AQ-2. Use ARB, SMAQMD and SACOG guidelines for Sacramento County facilities and operations in order to comply with mandated measures to reduce emissions from fuel consumption, energy consumption, surface coating operations, and solvent usage.
- AQ-3. Promote optimal air quality benefits through energy conservation measures in new development

- AQ-4. Support AQMD's development of improved ambient air quality monitoring capabilities and the establishment of standards, thresholds and rules to more adequately address the air quality impacts of proposed project plans and proposals.
- AQ-5. Require the use of Best Available Control Technology (BACT) to reduce air pollution emissions.

Mobile Source Control Policies

- AQ-6. Provide disincentives for single-occupant vehicle trips through parking supply and pricing controls in areas where supply is limited and alternative transportation modes are available so as not to cause economic disruption, or through other measures identified by SMAQMD and incorporated into regional plans.
- AQ-7. Support the use of demand management and pricing controls as near-term measures for attaining Air Quality Attainment Plan goals and policies.
- AQ-8. Implement the Sacramento City/County Bikeways Master Plan.
- AQ-9. Secure adequate funding for Regional Transit so that transit is a viable transportation alternative. Development shall pay its fair share of the cost of transit facilities required to serve the project.
- AQ-10. Provide incentives for the use of transportation alternatives, including a program for the provision of financial incentives for builders that construct ownership housing within a quarter mile of existing and proposed light rail stations.
- AQ-11. Require as a building standard the installation of electrical service in all new residential development that can be used for the overnight charging of electrical vehicles.
- AQ-12. The County shall establish an incentive based program for the installation of electrical service for recharging electrical vehicles in public and private parking facilities sufficient to meet demand.
- AQ-13. Require the consideration of HOV lanes in all street and highway widening and new construction projects for arterials and wider rights-of-way.
- AQ-14. Develop a model County employee trip reduction program which may include, but not be limited to, flexible and compressed work schedules, commuter matching services, telecommuting, preferential carpool/vanpool parking, carpool/vanpool and transit subsidies, and all other commute alternative incentives.

- AQ-15. All new major indirect sources of emissions shall be reviewed and modified or conditioned to achieve a reduction in emissions. This indirect source review program will be developed in coordination with SACOG and SMAQMD, and include the following features:
- A. A 15 percent reduction in emissions from the level that would be produced by a base-case project assuming full trip generation per the current ITE Trip Generation Handbook.
 - B. A focus on cost-effectiveness measured in terms of cost per ton of pollutant avoided.
 - C. A list of cost-effective measures to be developed, maintained, and annually reviewed by SMAQMD.
 - D. A maximum expenditure cap which will be computed for each indirect source on the basis of factors including, but not limited to, total emissions and project value.
 - E. A process for obtaining a waiver from the 15 percent requirement if it is found that a lower level of reduction is all that can be achieved with cost-effective measures and offsets, or that achieving the full 15 percent reduction would cost more than expenditure cap.
 - F. An exception for projects which have already undergone the indirect source review at some point in the development approval process.
 - G. A procedure to give full credit for other measures required in a project that may also achieve a reduction in emissions.
- AQ-16. Support intergovernmental efforts directed at stricter tailpipe emissions standards.

Land Use Control Policies

- AQ-17. Require that development projects be located and designed in a manner which will conserve air quality and minimize direct and indirect emission of air contaminants.
- AQ-18. Encourage employment-intensive development, having the potential to employ 200 or more employees, where adequate transit service is planned, and discourage such development where adequate transit service is not planned.
- AQ-19. Identify the air quality impacts of development proposals to avoid significant adverse impacts and require appropriate mitigation measures or offset fees.

- AQ-20. Submit development proposals to AQMD for review and comment in compliance with CEQA prior to consideration by the appropriate decision making body.
- AQ-21. Provide for the location of ancillary employee services (including, but not limited to, child care, restaurants, banking facilities, convenience markets) at major employment centers for the purpose of reducing midday vehicle trips.
- AQ-22. Provide for buffers between sensitive land uses and sources of air pollution or odor.
- AQ-23. Promote mixed-use development to reduce the length and frequency of vehicle trips.
- AQ-24. Provide for increased intensity of development along existing and proposed transit corridors.
- AQ-25. Require that new development be designed to promote pedestrian and bicycle access and circulation.
- AQ-26. Accommodate growth within existing urban areas (infill) as a priority over urban expansion.
- AQ-27. Require that all employee parking areas for new development be designed with controllable access.
- AQ-28. Require that large new developments dedicate land for use as park-and-ride lots if suitably located.
- AQ-29. Require traffic counter loops and traffic management hardware at nonresidential garage entrances, driveways, new intersections, and other appropriate locations.
- AQ-30. Require that new commercial and industrial projects adjacent to bus stops make provisions in their project design for park-and-ride spaces.
- AQ-31. Preserve and ensure the dedication of rights-of-way and station sites along future light rail extensions.
- AQ-32. Require that new and replacement fuel storage tanks at automobile and light duty truck refueling stations be clean-fuel compatible, if technically and economically feasible.

Ozone Depletion Control Policy

- AQ-33. Require the recovery of chlorofluorocarbons (CFC's) when air conditioning and refrigeration units are serviced or disposed.

Other Relevant Policies

- AQ-34. Support revisions to the Air Quality Attainment Plan to accelerate and strengthen market-based strategies consistent with the General Plan.
- AQ-35. In conjunction with SMAQMD and SACOG, support and participate in a public education and outreach program dealing with air quality issues, with a goal of attaining a solid foundation of public support for needed air quality measures.
- AQ-36. Coordinate air quality planning efforts with other local, regional, and state agencies.
- AQ-37. Maximize air quality benefits through selective use of vegetation in landscaping and through revegetation of appropriate areas.
- AQ-38. A conformity analysis shall be conducted to assure that transportation plans, programs, and projects will not impair efforts to meet air quality standards.

IMPLEMENTATION MEASURES

A. Air Quality Review

AQMD has legislative authority to review and mitigate indirect sources in order to meet the mandated reductions in emissions. Sacramento County must, as an area experiencing "severe" air pollution, reduce emissions by an average of five percent annually. It is the policy of AQMD to achieve no net emissions increase from new development.

Since the County has primary responsibility for the land use decision-making process, it is necessary to integrate the responsibilities of both jurisdictions into a single process. The approach that is proposed incorporates an air quality review procedure into the existing land use project review process. Figure II-1 graphically describes that process.

A project will be reviewed for air quality impacts during the routine planning staff and CEQA review process. Thresholds to determine significant impacts, criteria for project review, and mitigation measures will be developed by AQMD. The actual review will occur at the county or city level during the normal review process.

AQMD would assume the responsibility for monitoring approved mitigation programs. Also, the offset fees generated would be disbursed by AQMD. The fees might fund the operation of a new transit route, the extension of light rail service, the provision of shuttle service, or the elimination of an existing stationary source of emissions.

The permit process is not intended to duplicate the project review mandated by CEQA. Rather, the procedure is intended to supplement the existing environmental review process to ensure that air quality concerns are adequately addressed.

1. In conjunction with SMAQMD and SACOG, assess levels of ROG content of influent flow to municipal wastewater treatment facilities, and develop measures to reduce the ROG content.

B. AQMD's Implementation Measures

Sacramento County and AQMD strongly support market based incentives and disincentives to reduce automobile use. Implementation of the market based measures which are contained in the AQAP should be aggressively pursued. These measures include parking price controls, tolls, peak hour pricing, and tax incentives. As further market based measures are proposed or developed, they should be considered for inclusion in the AQAP and this Element. (See also Circulation Element policy and discussion regarding market based incentives.)

1. Work with SMAQMD, SACOG, and the business community to create trip reduction goals, a program to implement controls such as flexible and compressed work schedules, commuter matching services for vanshare and rideshare programs, telecommuting, preferential carpool/vanpool parking, parking pricing, transit subsidies, and other controls as may be necessary to obtain and monitor county trip reduction goals.
2. Implement traffic signal preemption for transit vehicles to provide consistency and dependability in transit schedules.
3. Reassess Sacramento County tax policies and parking standards for maximization of TCM effectiveness.

C. Placement of Bikeways

1. Examine the feasibility of providing bikeway routes through employment centers that encourage bicycle commute trips.

D. Low Emission Vehicles

Low emission vehicles should be promoted as a part of our overall strategy, through Policy AQ-11 and the following implementation measures.

1. Provide incentives and infrastructure to support and encourage the use of electric and other clean alternative fuel/low emission vehicles.
2. Develop and implement, in cooperation with the Air Quality Management District, the means to increase employee awareness of the availability and advantages of using electric and other clean alternative fuel/low emission vehicles.
3. Promote the development and commercialization of zero-emission electric vehicles by providing adequate recharging stations, preferential parking, particularly for employees.

4. Promote and support the development and operation of electric shuttle services.
5. Convert Sacramento County vehicles to use Clean Alternative Fuels/Low Emissions Vehicles (CAF/LEV), such as those utilizing methanol, ethanol, natural gas, electric power, propane, and reformulated gasolines.
6. Work with the business and commercial community to plan and implement the infrastructure needed for CAF/LEV use. Infrastructure shall be designed to accelerate the introduction of CAF/LEV technologies. Sacramento County review and permits for such facilities shall be streamlined.
7. Employers, property owners, and project developers shall receive credits through the County's Transportation Systems Management program for the following:
 - ° Providing designated parking spaces for electric vehicle charging
 - ° Providing electric vehicles that are used for work trips for which transit service is not available or feasible
 - ° Financially supporting programs which provide transit services using electric vehicles or assist residents, employees, or employers in purchasing and using electric vehicles.

E. Point and Area Sources

1. Require surveying of County facilities and operations that involve the use of industrial diesel IC engines, heavy construction equipment, gasoline utility engines, or boilers and reduce the emissions through electrification, use of alternative clean fuels, or catalytic controls.
2. Minimize solvent use and release of ROG in asphalt paving operations performed by Sacramento County, or by paving operations requiring Sacramento County permits.
3. Require that direct application of industrial solvents that emit ROG be done using controls consistent with ARB and SMAQMD guidelines in order to minimize ROG emissions for operations at Sacramento County Facilities, and consider requirements for commercial and industrial operations at new and modified facilities requiring County permits.
4. Extend the use of vapor recovery systems to aircraft and other fuel-handling operations that require County permits for their operations.
5. Parking lots and facilities may be designed to provide designated, preferred, and appropriately sized parking spaces for electric vehicles.

Integrated Land Use Entitlement and Air Quality Review

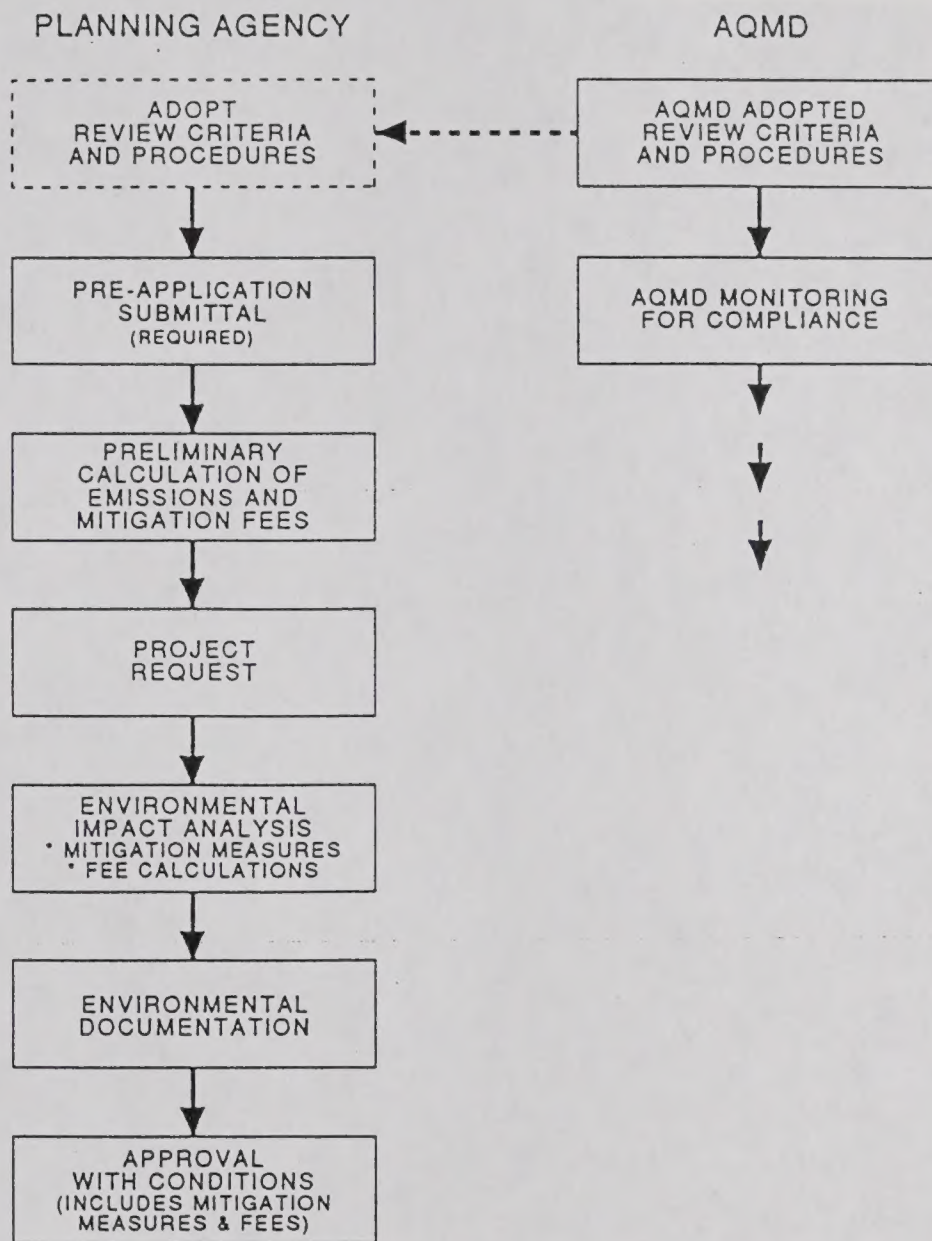


Figure II-1. The Integration of the Land Use Planning Process with the Air Quality Planning Process in Sacramento County

Source: Air Quality Management District (AQMD)

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